

The goals of communicating bad news in health care: do physicians and patients agree?

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Abstract

Background Communicating bad news serves different goals in health care, and the extent to which physicians and patients agree on the goals of these conversations may influence their process and outcomes. However, we know little about what goals physicians and patients perceive as important and how the perceptions of physicians and patients compare.

Objective To compare physicians' and patients' perceptions of the importance of different communication goals in bad news conversations.

Design Survey-based descriptive study.

Participants Physicians in California recruited via a medical board mailing list ($n = 67$) and patients ($n = 77$) recruited via mailing lists and snowball recruitment methods.

Measurements Physicians reported their experience communicating bad news, the extent to which they strive for various goals in this task and their perceptions of the goals important to patients. Patients reported their experience receiving bad news, the goals important to them and their perceptions of the goals important to physicians.

Main results Physicians and patients were quite similar in how important they personally rated each goal. However, the two groups perceived differences between their values and the values of the other group.

Conclusions Physicians and patients have similar perceptions of the importance of various goals of communicating bad news, but inaccurate perceptions of the importance of particular goals to the other party. These findings raise important questions for future research and clinical practice.

Introduction

Health professionals must routinely communicate bad news, including abnormal test results, poor prognoses and adverse treatment out-

comes. This task is often uncomfortable,^{1,2} but its effective accomplishment is a key determinant of patient outcomes.^{3,4} Although a growing literature addresses strategies for giving bad news,^{5–9} the optimal strategy is often unclear.

In part, the difficulty of defining optimal strategies for communicating bad news in different circumstances reflects the multiplicity of potential goals implicit in this task. Bad news discussions serve many goals for patients and health professionals, and the success of these discussions can only be determined with reference to these specific goals. Furthermore, the goals of patients and health professionals may differ, and this discordance may influence the outcomes of the conversation. However, a review of the literature on communicating bad news reveals surprisingly little explicit mention of goals and addresses the topic only indirectly, through the outcome measures used to define successful communication. In addition, physicians' perceptions of the goals that are important to patients might influence how physicians disclose bad news. Researchers have long recognized that people tailor their communications to match the perceived values and needs of the audience.¹⁰ However, the communications are problematic if these perceptions are inaccurate.

We examine six potential goals of bad news conversations and explore physicians' and patients' perceptions of how important these different goals are in communication efforts. We also obtain descriptive data to inform the larger question of what it means to have a 'good' bad news discussion according to physicians and health-care recipients.

Multiple goals for bad news communication

We began this study by reviewing the medical literature on bad news discussions and identified six potential goals of communicating bad news in clinical settings. This process involved a thorough search of the literature in medical and psychology databases (PubMed and PsycInfo), which produced 98 publications. From these publications, we developed a list of communication goals either implicitly or explicitly advocated by each paper. We ultimately culled the original list of goals to six broad goals for bad news communication: (i) provide information, (ii) persuade patients to adopt recommendations, (iii) minimize patient distress, (iv) promote

patient satisfaction, (v) maintain patient hope and (vi) minimize health professional discomfort.

Provide information

A primary goal for communicating bad news is to provide patients with clear and complete information about undesirable outcomes. Patients need accurate and clear information to make informed decisions and plan for their future.^{11–13} This need for information is the ultimate justification for disclosing bad news.^{14–16}

Persuade patients to adopt recommendations

A second goal is to persuade patients to adopt recommendations. In many clinical circumstances, there is an optimal course of action associated with a favourable balance of benefits and harms. In these circumstances, health professionals may desire – consciously or unconsciously – to persuade patients towards these actions, and such persuasion may become part of the bad news discussion. The ethical appropriateness of such persuasion depends on the situation and requires health professionals to be conscious of their intentions to persuade patients and to make these intentions explicit to patients.^{17–19}

Minimize patient distress

A third goal is to minimize the distress patients experience as a result of hearing bad news. Bad news can be emotionally overwhelming to patients, and health professionals can exacerbate this distress by giving the news poorly.²⁰ Reducing patient distress is thus an important goal, albeit one that is particularly challenging for numerous reasons [e.g. 8].

Promote patient satisfaction

A fourth goal is to increase patient satisfaction with the experience of receiving bad news.⁸ Numerous studies imply the importance of this goal by their increasing use of patient experiences

as an indicator of the quality of physician–patient communication [e.g. 3, 15, 21]. Several factors may influence patient satisfaction, including the clarity and duration of the discussion, provider responsiveness to the patient's emotions and patient involvement in decision making.^{1,17}

Maintain patients' hope

A fifth goal is to promote or sustain patients' hope or optimism.^{19,22} Hope can be a powerful predictor of adjustment and recovery,^{23,24} although hope must be balanced with honesty and realism.^{21,22} However, both professional norms and empirical evidence support the maintenance of hope as a desirable goal in communicating bad news.²⁵

Minimize health professional's discomfort

A final goal that health professionals might pursue when giving bad news is to minimize their own discomfort with the task. This discomfort may result from fears of patients' reactions, their own emotions, their lack of competence in the task or their fear of being blamed.^{1,2} Minimizing such discomfort is an important goal to the extent that it may influence health professionals' own emotional well-being, satisfaction and competence giving bad news.^{25–27}

Overview

Communicating bad news is a central aspect of clinical practice, and bad news discussions serve several distinct potential goals that may influence the outcomes of such discussions. Having identified these goals, we examined them empirically in a descriptive study that addressed three questions. First, what goals do physicians strive to achieve and to what extent do patients believe that physicians are trying to achieve these goals? Second, what are patients' goal preferences and do physicians accurately perceive these preferences? Third, does prior experience

with giving and receiving bad news correspond to the goals physicians strive to achieve and the goals patients prefer?

Methods

Participants

We recruited two samples for this study. From the mailing lists for the medical board of California, we randomly selected 200 names to receive invitations to participate by postal mail. Potential participants also received a reminder postcard 3 months later. Participants received a \$20 gift card. We excluded from analyses physicians who reported no experience giving bad news as part of their job. These efforts produced a sample of 67 physicians, a response rate of 34%.

We recruited the sample of patients using a snowball recruitment method. The qualifications to participate were that the person be over the age of thirty (to increase the likelihood of experience accessing health care) and not employed by the health-care profession. Project personnel sent an email participation request to qualified acquaintances and also requested that those acquaintances send the participation request to anyone else who might be interested. We excluded patients who reported no experience with receiving bad news about their health ('bad news' was not defined). These recruitment efforts produced a sample of 77 participants. For our purposes, we refer hereafter to this second sample as 'patients'. We did not specify a target sample size; however, a priori power analyses indicated that a total sample of 128 (64 physicians and 64 patients) would be sufficient to detect a moderate difference between groups for our outcomes of interest (Cohen's $d = 0.50$), setting alpha at 0.05 and power at 0.80, and a total sample of 64 participants would be sufficient to detect moderate correlations of $r = 0.30$. Thus, our sample size was sufficient to detect effects with our intended analyses.

Procedures

The surveys for the physician and patient differed in several ways. Of note, validity and reliability data are unavailable because these surveys were designed for the unique goals of this study. Physicians first reported their experience giving bad news on four items: a general item asking, 'How much experience do you have giving bad news about health?' (1 = *little or no experience*, 5 = *lots of experience*), a more specific item asking participants to estimate how often they have given bad news as part of their job (1 = *less than once a year*, 9 = *several times a day*), and two items asking about the frequency with which physicians give mild-to-moderate and severe bad news (1 = *less than once a year*, 9 = *several times a day*). In our sample, 44.8% of physicians reported giving mild-to-moderate bad news at least once a week, and 46.3% reported giving severe bad news at least once a month. We defined mild-to-moderate bad news as any new information that is perceived by the recipient to be negative or unpleasant, but not chronically painful or life-threatening – e.g. a recommendation to make an undesirable lifestyle change or a diagnosis of an easily treated form of cancer or other disease. Severe bad news was defined in the survey as any new information that involves something chronically painful or life-threatening – e.g. a new diagnosis, a poor prognosis or failure of treatment. Because the four experience items were highly correlated, we created a composite measure of physician experience by standardizing item responses and then averaging the four standardized scores (Cronbach's $\alpha = 0.88$).

Physicians then read brief descriptions of each of the six goals and responded to questions asking them to indicate the extent to which they personally strive for each goal when giving bad news (1 = *not at all important*, 5 = *extremely important*) and to '[think] about the patient's perspective' and indicate the extent to which patients value each goal (1 = *not at all important*, 5 = *extremely important*). We were concerned that physicians would be reluctant to endorse the goal of minimizing their own discomfort if it was labelled as such. Thus, we

labelled this goal *preserving the news-giver's emotional integrity* in the survey.

Patients first reported their experience receiving bad news about their health on three items: two general items asking, 'How much experience do you have receiving bad news about health from doctors/nurses?' (1 = *little or no experience*, 5 = *lots of experience*) and a more specific item asking participants to report how long ago they last received bad news about their health (1 = *more than 5 years ago*, 9 = *less than a week ago*). These items revealed that 59.7% of our patient sample last received bad health news over a year ago, and 13% of patients had received bad health news within the past month. Patients then read brief descriptions of each of the six goals and indicated how personally important each goal is to them when receiving bad news about their health (1 = *not at all important to me*, 5 = *very important to me*) and to indicate the extent to which they think physicians strive for each goal when giving bad news to patients (1 = *not at all*, 5 = *very much*).

Analyses

We conducted one-way, within-subjects ANOVAS to examine whether ratings of different communication goals varied within samples. When a significant effect emerged, we conducted post hoc analyses using paired *t*-tests and a Bonferroni correction for alpha inflation. We used independent *t*-tests to examine differences in communication goal ratings between groups. Finally, we used correlation analyses to assess the relationship between experience giving and receiving bad news, demographic variables and the various communication goals.

Results

Sociodemographic variables

Descriptive statistics appear in Table 1. We first examined the relationships between gender, race/ethnicity, and age and physicians' and patients' goal ratings, as well as the relationship between education level and patients' goal rat-

Table 1 Demographic information

	Physicians	Patients
Number of participants in sample	67	77
Mean age	54	48
% Female	27%	60%
White/Caucasian	58%	74%
Asian	31%	2%
Hispanic/Latino	3%	13%
Black/African-American	3%	6%
Native Hawaiian/Pacific Islander	2%	1%
Native America	0%	0%
Other	3%	4%

ings. Only two effects emerged for gender: female patients endorsed the goal of maintaining hope ($M = 4.58$, $SD = 0.67$) more than did male patients ($M = 4.04$, $SD = 1.2$), $t(83) = 2.66$, $P < 0.01$, and female patients endorsed the goal of persuading adoption of recommendations ($M = 4.62$, $SD = 0.75$) more than did male patients ($M = 4.13$, $SD = 1.0$), $t(73) = 2.32$, $P = 0.02$. No interpretable effects of race/ethnicity emerged for either sample.

Patients' age was unrelated to any goal ratings. However, older physicians more than younger physicians believed that patients valued the goal of persuasion, $r(66) = 0.25$, $P = 0.04$. Lower patient education level was also associated with endorsement of the goal of persuasion, $r(75) = -0.26$, $P = 0.02$, as well as minimizing

health professionals' discomfort, $r(75) = -0.25$, $P = 0.03$.

Physicians' goal preferences

Our first research question addressed the goal preferences of physicians and patients' perceptions of physicians' goal preferences. We asked physicians to evaluate the goals they strive to achieve when giving bad news and patients to report their perceptions of their physicians' goals during these discussions. Physicians reported that their most important goal was to provide information, and their least important goal was to minimize personal discomfort; the other goals fell between these two extremes (see Table 2). Although patients also perceived that providing information was the most important goal to physicians, their perceptions of the importance of other goals to physicians varied from the reports of physicians themselves. Most notably, patients perceived that minimizing patient distress and promoting patient satisfaction were relatively unimportant goals to physicians. Furthermore, comparisons of the mean ratings of each goal provided by physicians and patients revealed that with one exception (minimizing health professional discomfort), patients thought each goal was less important to physicians than physicians themselves reported, $t_s > 2.02$, $p_s < 0.05$.

	Physician goals			
	Reported by physician		Perceived by patients	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Providing information*	4.6 _a	0.6	4.1 _a	0.8
Persuading adoption of recommendations*	4.2 _b	0.9	3.9 _b	1.0
Promoting patient satisfaction*	4.2 _b	0.8	3.3 _{de}	1.0
Promoting patient hope*	4.3 _b	0.7	3.6 _c	1.0
Minimizing patient distress*	4.2 _b	0.8	3.2 _e	1.1
Minimizing personal discomfort	3.4 _c	1.2	3.5 _{cd}	1.1

Within columns, means with different subscripts are significantly different at $P < 0.05$. Within rows, goals marked with a * indicate significant differences between patients and physicians at $P < 0.05$.

Table 2 Physician and patient perceptions of physicians' goals

Table 3 Physician and patient perceptions of patients' goal preferences

	Reported by patient		Perceived by physicians	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Providing information*	4.9 _a	0.5	4.7 _a	0.6
Persuading adoption of recommendations*	4.5 _b	0.9	3.7 _d	1.1
Promoting patient satisfaction	4.4 _b	1.0	4.4 _c	0.9
Promoting patient hope	4.4 _b	0.9	4.6 _{ab}	0.8
Minimizing patient distress	4.3 _b	1.0	4.4 _{bc}	0.7
Minimizing personal discomfort*	3.6 _c	1.3	2.8 _e	1.3

Within columns, means with different subscripts are significantly different at $P < 0.05$. Within rows, goals marked with a * indicate significant differences between patients and physicians at $P < 0.05$.

Patients' goal preferences

Our second research question addressed patient preferences among the six communication goals and physicians' perceptions of patients' goal preferences. As evident on the left side of Table 3, patients clearly rated providing information as most important, minimizing health professional discomfort as least important and the remaining communication goals in between these two extremes. Similarly, physicians perceived that providing information (along with promoting hope and minimizing patient distress) was most important, and minimizing health professional discomfort was least important to patients. However, a comparison of patient preferences with physicians' perceptions of these preferences revealed that physicians were fairly – but not completely – accurate in their perceptions of patients' preferences. Statistical comparisons between physicians' perceptions and patients' preferences revealed that patients rated providing information, persuading adoption of recommendations and minimizing health professional discomfort as more important than physicians believed they would, $t_s > 2.06$, $p_s < 0.02$.

Comparing goal preferences and perceptions of physicians and patients

A comparison of the goal ratings of physicians and patients yields interesting findings. Examination of the means in the left columns of

Tables 2 and 3 reveals that the two groups were quite similar in their mean ratings of the six goals. Both groups rated providing information as most important, minimizing physician discomfort as least important and rated the rest of the goals in between. Indeed, the average difference between these two sets of six means is small ($M = 0.2$, range = 0.1 to 0.3, $SD = 0.09$), and the ratings differ only for the goals of providing information and persuasion, which patients rated higher than did physicians, $t_s = 3.18$ and 1.99 , $p_s = 0.001$ and 0.04 , respectively. In short, we found high concordance between physicians and patients in how personally important they rate each of the goals.

Examination of the means on the right columns of Table 2 and 3 reveals that physicians and patients displayed considerable variability in their perceptions of the other group's goal importance ratings. The perceptions of physicians and patients differed significantly in five of six instances, all $t_s(138) > 3.18$, all $p_s < 0.01$. The one exception was the goal of persuasion, $t(140) = 0.75$, $P = 0.45$. When viewed collectively, the means on the right side of Tables 2 and 3 and the means on the left side of Tables 2 and 3 suggest that physicians and patients are quite similar in the importance they attach to each of the goals, yet err in their perceptions of how important the other group regards each of the goals. That is, the two groups perceive dissimilarity in goal importance where there is none.

An examination of the goal ratings of physicians and patients also revealed an unexpected

pattern: ignoring the extreme goals of providing information and minimizing personal discomfort, both groups displayed less variation in mean responses in their own goal preferences than they did in their perceptions of the other group's preferences. The means displayed on the left sides of Tables 2 and 3 reveal that both physicians and patients showed little variability in their preference for the middle four goals. One interpretation of this pattern is that physicians and patients may have difficulty making fine discriminations between communication goals that do not fall at the extremes of the importance continuum.

Experience with giving and receiving bad news

Our third research question addressed whether prior experience giving and receiving bad news correspond to the goals physicians strive to achieve and the goals patients regard as important. In terms of physicians' own goal preferences, two effects emerged. More experience correlated positively with the goal preferences of providing information, $r(65) = 0.28$, $P = 0.02$, and minimizing patient distress, $r(65) = 0.28$, $P = 0.02$. In terms of physicians' perceptions of patients' preferences, only one effect emerged. More experience giving bad news correlated negatively with the perception that patients would rate minimizing health professional discomfort as important, $r(65) = -0.37$, $P < 0.01$.

Turning to patients' experience *receiving* bad news, patients' experience only predicted one goal rating: recent receipt of bad news was positively correlated with the perception that minimizing health professional discomfort is an important goal to physicians, $r(73) = 0.31$, $P < 0.01$.

Discussion

The purpose of this research was to identify the goals that guide health professionals when they communicate bad news and to compare these goals with the goals of patients. One clear contribution of this research is the identification of six distinct potential goals served by the communication of bad news. Articulating these goals

underlying health communications is important because it facilitates understanding of what health professionals vs. patients deem important. It also represents a first step in evaluating the success of bad news discussions.

Our examination of communication goals revolved around three questions: the goals valued by physicians and patients, physicians' perceptions of patients' goals, patients' perceptions of physicians' goals and the role of experience giving and receiving bad news in these perceptions. Several consistent findings emerged. First, providing information was the most important communication goal, and greater experience with communicating bad news was associated with higher ratings of this goal. The second consistent finding was the low ratings by both physicians and patients the goal of minimizing the health professional's discomfort.

These two broad findings are not surprising, as the primary purpose of communicating bad news is to provide information. The more surprising findings relate to patients' perceptions of what is important to physicians and physicians' perceptions of what is important to patients. Although there was agreement about some goals, there was disagreement about others. First, patients viewed several goals as less important to physicians than the physicians themselves did. In addition, patients perceived minimizing patient distress as being the least important goal to physicians, well below physicians' ratings of this goal. Second, in three instances, physicians rated goals as less important to patients than did the patients. This difference is most striking for the goal of persuading patients to adopt recommendations, which was rated notably higher by patients than by physicians. These findings suggest that patients desire guidance in clinical circumstances marked by bad news and that physicians may underestimate this desire.

Implications

Our findings suggest that physicians and patients are generally quite similar in the importance they personally attach to each goal, but they

appear to err in their perceptions of how important each goal is to the other party. Physicians and patients may perceive considerable discord between their values and the values of the other party when there is actually little disagreement. This error in perception, if real, is clinically important because it could engender communication problems. Because people often tailor their communications to match the values and needs of the audience,¹⁰ physicians may adjust their communication efforts according to their (mis)perceptions of what patients value.

The findings also shed light on the complexity of bad news discussions, which manifest not only content elements but goals that can be evaluated and optimized. Heightened attention to the goals as well as the content of bad news discussions may improve their quality by allowing health professionals to be clearer about the goals they should try to achieve through such discussions. For example, the goals we describe, while distinct, are not always competing. Health professionals can and should pursue multiple goals during bad news discussions.

However, the multiplicity of potential goals highlights the need for health professionals to undertake such discussions in a 'mindful' way.²⁸ Because any bad news discussion can serve different goals for both health professionals and patients, health professionals need to be thoughtful and conscious of these goal(s) and deliberate in what they are trying to achieve in these discussions. For example, the goal of persuading patients to adopt recommendations, while ethically defensible in particular circumstances, may be undertaken unconsciously rather than consciously, and this might raise ethical problems if it prevents health professionals from eliciting and respecting patient preferences. Other goals might also be inappropriate if pursued in an unreflective manner or overemphasized in particular circumstances. For example, excessive and unconscious attention to the goals of maintaining patient hope and minimizing distress may lead to avoidance of meaningful information and interfere with health professionals' ability to facilitate patients' acceptance of a terminal prognosis.

Limitations and conclusions

Our study represents an important first step in examining how health professionals view different goals in bad news communication. However, the physician and patient samples were small and not matched with one another, and we used non-random recruitment methods. The generalizability of our data is thus unknown, and further studies are needed to confirm our findings. The measures used in the study were novel, given the lack of prior work in this area, and further studies need to evaluate their reliability and validity. Nevertheless, our study provides seminal information that endorses the value of further work in this understudied area. More research is needed not only to confirm our findings but to determine whether the prioritization of different goals by physicians and patients influences the content, process and outcomes of communicating bad news.

This exploratory study cannot provide normative recommendations for the goals health professionals should prioritize when communicating bad news. The optimal goals for a given bad news discussion will likely vary according to the nature of the news, the needs of the patient and perhaps even the comfort level and personality of the clinician. Our study provides an initial description of the variety of goals served by the communication of bad news and supports the need for physicians to be sensitive to differences in how they and their patients prioritize these goals. It remains for future research to elucidate how these goals can be optimally aligned and tailored to different clinical circumstances and how the communication of bad news can be improved.

References

- 1 Ambuel B, Mazzone MF. Breaking bad news and discussing death. *Primary Care*, 2001; **28**: 249–267.
- 2 Buckman R. Breaking bad news: why is it still so difficult? *British Medical Journal*, 1984; **288**: 1597–1599.
- 3 Butow PN, Kazemi JN, Beeney LJ, Griffin A, Dunn SM, Tattersall MHN. When the diagnosis is cancer:

- patient communication experiences and preferences. *Cancer*, 1996; **77**: 2630–2637.
- 4 Roberts CS, Cox CE, Reintgen CS, Baile WF, Gibertini M. Influence of physician communication on newly diagnosed breast cancer patients' psychological adjustment and decision-making. *Cancer*, 1994; **74**: 336–341.
- 5 Baile WF, Buckman R, Lenzi R, Glober G, Baile EA, Kudelka AP. SPIKES: a six-step protocol for delivering bad news. *Oncologist*, 2000; **5**: 302–311.
- 6 Baile WF, Aaron J. Patient-physician communication in oncology: past, present, and future. *Current Opinion in Oncology*, 2005; **17**: 331–335.
- 7 Fallowfield L, Jenkins V. Communicating sad, bad, and difficult news in medicine. *Lancet*, 2004; **363**: 312–319.
- 8 Ptacek JT, Eberhardt TL. Breaking bad news: a review of the literature. *Journal of the American Medical Association*, 1996; **276**: 496–502.
- 9 Shields CE. Giving patients bad news. *Primary Care*, 1998; **25**: 381–390.
- 10 Cialdini RB. *Influence: Science and Practice*, 5th edn. Needham Heights, MA: Allyn & Bacon, 2008.
- 11 Goldie L. The ethics of telling the patient. *Journal of Medical Ethics*, 1982; **8**: 128–133.
- 12 Freedman B. Offering truth: one ethical approach to the uniformed cancer patient. *Archive of Internal Medicine*, 1993; **153**: 572–576.
- 13 Fallowfield L, Jenkins V, Beveridge HA. Truth may hurt but deceit hurts more: communication in palliative care. *Palliative Medicine*, 2002; **16**: 297–303.
- 14 Baile WF, Kudelka AP, Beale EA *et al.* Communication skills training in oncology. *Cancer*, 1999; **86**: 887–897.
- 15 Ellis PM, Tattersall MHN. How should doctors communicate the diagnosis of cancer to patients? *Annals of Medicine*, 1999; **31**: 336–341.
- 16 Loge JH, Kaasa S, Hytten K. Disclosing the cancer diagnosis: the patients' experiences. *European Journal of Cancer*, 1997; **33**: 878–882.
- 17 Back AL, Curtis AR. Communicating bad news. *Western Journal of Medicine*, 2002; **176**: 177–180.
- 18 Salander P. Bad news from the patient's perspective: an analysis of the written narratives of newly diagnosed cancer patients. *Social Science & Medicine*, 2002; **55**: 721–732.
- 19 Clayton JM, Butow PN, Arnold RM, Tattersall MHN. Fostering coping and nurturing hope when discussing the future with terminally ill cancer patients and their caregivers. *Cancer*, 2005; **103**: 1965–1975.
- 20 Lerman C, Daly M, Walsh WP *et al.* Communication between patients with breast cancer and health care providers: determinants and implications. *Cancer*, 1993; **72**: 2612–2620.
- 21 Dunn SM, Butow PN, Tattersall MH *et al.* General information tapes inhibit recall of the cancer consultation. *Journal of Clinical Oncology*, 1993; **11**: 2279–2285.
- 22 Yates P. Toward a reconceptualization of hope for patients with a diagnosis of cancer. *Journal of Advanced Nursing*, 1993; **18**: 701–706.
- 23 Groopman J. *The Anatomy of Hope: How People Prevail in the Face of Illness*. New York: Random House, 2004.
- 24 Taylor S, Lichtman R, Wood J. Attributions, beliefs about control, and adjustment to breast cancer. *Journal of Personality and Social Psychology*, 1984; **46**: 489–502.
- 25 Ramirez AJ, Graham J, Richards MA *et al.* Burnout and psychiatric disorder among cancer clinicians. *British Journal of Cancer*, 1995; **71**: 1263–1269.
- 26 Holland JC. Now we tell, but how well? *Journal of Clinical Oncology*, 1989; **7**: 557–559.
- 27 Ramirez AJ, Graham J, Richards MA *et al.* Burnout and psychiatric disorder among cancer clinicians. *British Journal of Cancer*, 2005; **71**: 1263–1269.
- 28 Epstein RM. Mindful practice. *JAMA*, 1999; **282**: 833–839.